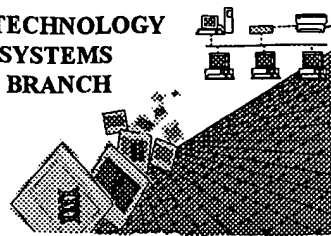


BIOTECHNOLOGY
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1641
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NA

RAW SEQUENCE LISTING
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RAW SEQUENCE LISTING

DATE: 09/27/2002

PATENT APPLICATION: US/09/134,333A

TIME: 14:15:40

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Output Set: N:\CRF4\09272002\I134333A.raw

pp. 2-3
Does Not Comply
Corrected Diskette Needed

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3 <110> APPLICANT: LONGACRE-ANDRE, SHIRLEY
4   ROTH, CHARLES
5   NATO, FARIDABNO
6   BARNWELL, JOHN
7   MENDIS, KAMINI
9 <120> TITLE OF INVENTION: RECOMBINANT PROTEIN CONTAINING A C-TERMINAL FRAGMENT OF
PLASMODIUM MSP-1
11 <130> FILE REFERENCE: 0660-0135-0XCIP
13 <140> CURRENT APPLICATION NUMBER: 09/134,333A
14 <141> CURRENT FILING DATE: 1998-08-14
16 <150> PRIOR APPLICATION NUMBER: PCT/FR97/00290
17 <151> PRIOR FILING DATE: 1997-02-14
19 <150> PRIOR APPLICATION NUMBER: FR96/01822
20 <151> PRIOR FILING DATE: 1996-02-14
22 <160> NUMBER OF SEQ ID NOS: 15
24 <170> SOFTWARE: PatentIn version 3.1
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27 <211> LENGTH: 291
28 <212> TYPE: DNA
29 <213> ORGANISM: Artificial Sequence
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32 <223> OTHER INFORMATION: synthetic DNA
34 <220> FEATURE:
35 <221> NAME/KEY: CDS
36 <222> LOCATION: (1)..(291)
37 <223> OTHER INFORMATION:
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42 1          5          10          15
44 aac tct ggc tgt ttc aga cac ttg gac gag aga gag gag tgt aaa tgt      96
45 Asn Ser Gly Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys
46          20          25          30
48 ctg ctg aac tac aaa cag gag ggc gac aag tgc gtg gag aac ccc aac      144
49 Leu Leu Asn Tyr Lys Gln Glu Gly Asp Lys Cys Val Glu Asn Pro Asn
50          35          40          45
52 ccg acc tgt aac gag aac aac ggc ggc tgt gac gca gac gcc aaa tgc      192
53 Pro Thr Cys Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys
54          50          55          60
56 acc gag gag gac tcg ggc agc aac ggc aag aaa atc acg tgt gag tgt      240
57 Thr Glu Glu Asp Ser Gly Ser Asn Gly Lys Lys Ile Thr Cys Glu Cys
58 65          70          75          80
60 acc aaa ccc gac tcg tac ccg ctg ttc gac ggc atc ttc tgc agc taa      288
61 Thr Lys Pro Asp Ser Tyr Pro Leu Phe Asp Gly Ile Phe Cys Ser

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DATE: 09/27/2002

TIME: 14:15:40

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62 285 90 95 291

64 taa

67 <210> SEQ ID NO: 2

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69 <212> TYPE: PRT

70 <213> ORGANISM: Artificial Sequence

72 <220> FEATURE:

73 <223> OTHER INFORMATION: synthetic DNA *This is not a DNA sequence.*

75 <400> SEQUENCE: 2

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78 1 5 10 15

81 Asn Ser Gly Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys

82 20 25 30

85 Leu Leu Asn Tyr Lys Gln Glu Gly Asp Lys Cys Val Glu Asn Pro Asn

86 35 40 45

89 Pro Thr Cys Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys

90 50 55 60

93 Thr Glu Glu Asp Ser Gly Ser Asn Gly Lys Lys Ile Thr Cys Glu Cys

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98 85 90 95

101 <210> SEQ ID NO: 3

102 <211> LENGTH: 279

103 <212> TYPE: DNA

104 <213> ORGANISM: Plasmodium falciparum

106 <400> SEQUENCE: 3

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109 cathtagatg aaagagaaga atgtaaatgt ttattaaatt acaaacaaga aggtgataaa 120

111 tgtgttgaaa atccaaatcc tacttgtaac gaaaataatg gtggatgtga tgcagatgcc 180

113 aaatgtaccg aagaagattc aggtagcaac ggaaagaaaa tcacatgtga atgtactaaa 240

115 cctgattctt atccactttt cgatggtatt ttctgcagt 279

118 <210> SEQ ID NO: 4

119 <211> LENGTH: 354

120 <212> TYPE: DNA

121 <213> ORGANISM: Artificial Sequence

123 <220> FEATURE:

124 <223> OTHER INFORMATION: synthetic DNA

126 <220> FEATURE:

127 <221> NAME/KEY: CDS

128 <222> LOCATION: (1)..(354)

129 <223> OTHER INFORMATION:

131 <400> SEQUENCE: 4

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133 Glu Phe Asn Ile Ser Gln His Gln Cys Val Lys Lys Gln Cys Pro Glu

134 1 5 10 15

136 aac tct ggc tgt ttc aga cac ttg gac gag aga gag gag tgt aaa tgt 96

137 Asn Ser Gly Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys

138 20 25 30

140 ctg ctg aac tac aaa cag gag ggc gac aag tgc qtg qag aac ccc aac 144

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DATE: 09/27/2002

TIME: 14:15:40

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142      35              40              45
144 ccg acc tgt aac gag aac aac ggc ggc tgt gac gca gac gcc aaa tgc      192
145 Pro Thr Cys Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys
146      50              55              60
148 acc gag gag gac tcg ggc agc aac ggc aag aaa atc acg tgt gag tgt      240
149 Thr Glu Glu Asp Ser Gly Ser Asn Gly Lys Lys Ile Thr Cys Glu Cys
150 65              70              75              80
152 acc aaa ccc gac tcg tac ccg ctg ttc gac ggc atc ttc tgc agc tcc      288
153 Thr Lys Pro Asp Ser Tyr Pro Leu Phe Asp Gly Ile Phe Cys Ser Ser
154      85              90              95
156 tct aac ttc ttg ggc atc tcg ttc ttg ttg atc ctc atg ttg atc ttg      336
157 Ser Asn Phe Leu Gly Ile Ser Phe Leu Leu Ile Leu Met Leu Ile Leu
158      100              105              110
160 tac agc ttc att taa taa      354
161 Tyr Ser Phe Ile
162      115
165 <210> SEQ ID NO: 5
166 <211> LENGTH: 116
167 <212> TYPE: PRT
168 <213> ORGANISM: Artificial Sequence
170 <220> FEATURE:
171 <223> OTHER INFORMATION: synthetic DNA
173 <400> SEQUENCE: 5
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176 1      5              10              15
179 Asn Ser Gly Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys
180      20              25              30
183 Leu Leu Asn Tyr Lys Gln Glu Gly Asp Lys Cys Val Glu Asn Pro Asn
184      35              40              45
187 Pro Thr Cys Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys
188      50              55              60
191 Thr Glu Glu Asp Ser Gly Ser Asn Gly Lys Lys Ile Thr Cys Glu Cys
192 65      70              75              80
195 Thr Lys Pro Asp Ser Tyr Pro Leu Phe Asp Gly Ile Phe Cys Ser Ser
196      85              90              95
199 Ser Asn Phe Leu Gly Ile Ser Phe Leu Leu Ile Leu Met Leu Ile Leu
200      100              105              110
203 Tyr Ser Phe Ile
204      115
207 <210> SEQ ID NO: 6
208 <211> LENGTH: 342
209 <212> TYPE: DNA
210 <213> ORGANISM: Plasmodium falciparum
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215 catttagatg aaagagaaga atgtaaatgt ttattaaatt acaaaacaaga aggtgataaa      120
217 tgtgttgaaa atccaaatcc tacttgtaac gaaaataatg gtggatgtga tgcagatgcc      180
219 aaatgtaccg aagaagattc aggtagcaac ggaaagaaaa tcacatgtga atgtactaaa      240

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This is not a DNA sequence

*Please
correct this
error in
subsequent
sequences*

RAW SEQUENCE LISTING

DATE: 09/27/2002

PATENT APPLICATION: US/09/134,333A

TIME: 14:15:40

Input Set : A:\066001350XIP.txt

Output Set: N:\CRF4\09272002\I134333A.raw

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221 cctgattctt atccactttt cgatgggtatt ttctgcagtt cctctaactt cttaggaata      300
223 tcattcttat taatactcat gttaatatta tacagtttca tt                          342
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227 <211> LENGTH: 387
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229 <213> ORGANISM: Plasmodium falciparum
231 <220> FEATURE:
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233 <222> LOCATION: (1)..(387)
234 <223> OTHER INFORMATION:
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239 1 5 10 15
241 tgt caa tgt gaa aca gaa agt tat aag cag ctt gta gcc aac gtg gac      96
242 Cys Gln Cys Glu Thr Glu Ser Tyr Lys Gln Leu Val Ala Asn Val Asp
243 20 25 30
245 gaa ttc aac atc tcg cag cac caa tgc gtg aaa aaa caa tgt ccc gag      144
246 Glu Phe Asn Ile Ser Gln His Gln Cys Val Lys Lys Gln Cys Pro Glu
247 35 40 45
249 aac tct ggc tgt ttc aga cac ttg gac gag aga gag gag tgt aaa tgt      192
250 Asn Ser Gly Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys
251 50 55 60
253 ctg ctg aac tac aaa cag gag ggc gac aag tgc gtg gag aac ccc aac      240
254 Leu Leu Asn Tyr Lys Gln Glu Gly Asp Lys Cys Val Glu Asn Pro Asn
255 65 70 75 80
257 ccg acc tgt aac gag aac aac ggc ggc tgt gac gca gac gcc aaa tgc      288
258 Pro Thr Cys Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys
259 85 90 95
261 acc gag gag gac tcg ggc agc aac ggc aag aaa atc acg tgt gag tgt      336
262 Thr Glu Glu Asp Ser Gly Ser Asn Gly Lys Lys Ile Thr Cys Glu Cys
263 100 105 110
265 acc aaa ccc gac tcg tac ccg ctg ttc gac ggc atc ttc tgc agc taa      384
266 Thr Lys Pro Asp Ser Tyr Pro Leu Phe Asp Gly Ile Phe Cys Ser
267 115 120 125
269 taa      387
272 <210> SEQ ID NO: 8
273 <211> LENGTH: 127
274 <212> TYPE: PRT
275 <213> ORGANISM: Plasmodium falciparum
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280 1 5 10 15
283 Cys Gln Cys Glu Thr Glu Ser Tyr Lys Gln Leu Val Ala Asn Val Asp
284 20 25 30
287 Glu Phe Asn Ile Ser Gln His Gln Cys Val Lys Lys Gln Cys Pro Glu
288 35 40 45
291 Asn Ser Gly Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys
292 50 55 60

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RAW SEQUENCE LISTING

DATE: 09/27/2002

PATENT APPLICATION: US/09/134,333A

TIME: 14:15:40

Input Set : A:\066001350XIP.txt

Output Set: N:\CRF4\09272002\I134333A.raw

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295 Leu Leu Asn Tyr Lys Gln Glu Gly Asp Lys Cys Val Glu Asn Pro Asn
296 65 70 75 80
299 Pro Thr Cys Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys
300 85 90 95
303 Thr Glu Glu Asp Ser Gly Ser Asn Gly Lys Lys Ile Thr Cys Glu Cys
304 100 105 110
307 Thr Lys Pro Asp Ser Tyr Pro Leu Phe Asp Gly Ile Phe Cys Ser
308 115 120 125
311 <210> SEQ ID NO: 9
312 <211> LENGTH: 330
313 <212> TYPE: DNA
314 <213> ORGANISM: Plasmodium falciparum
316 <220> FEATURE:
317 <221> NAME/KEY: CDS
318 <222> LOCATION: (1)..(330)
319 <223> OTHER INFORMATION:
321 <400> SEQUENCE: 9
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323 Glu Thr Glu Ser Tyr Lys Gln Leu Val Ala Asn Val Asp Glu Phe Asn
324 1 5 10 15
326 atc tcg cag cac caa tgc gtg aaa aaa caa tgt ccc gag aac tct ggc 96
327 Ile Ser Gln His Gln Cys Val Lys Lys Gln Cys Pro Glu Asn Ser Gly
328 20 25 30
330 tgt ttc aga cac ttg gac gag aga gag gag tgt aaa tgt ctg ctg aac 144
331 Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys Leu Leu Asn
332 35 40 45
334 tac aaa cag gag ggc gac aag tgc gtg gag aac ccc aac ccg acc tgt 192
335 Tyr Lys Gln Glu Gly Asp Lys Cys Val Glu Asn Pro Asn Pro Thr Cys
336 50 55 60
338 aac gag aac aac ggc ggc tgt gac gca gac gcc aaa tgc acc gag gag 240
339 Asn Glu Asn Asn Gly Gly Cys Asp Ala Asp Ala Lys Cys Thr Glu Glu
340 65 70 75 80
342 gac tcg ggc agc aac ggc aag aaa atc acg tgt gag tgt acc aaa ccc 288
343 Asp Ser Gly Ser Asn Gly Lys Lys Ile Thr Cys Glu Cys Thr Lys Pro
344 85 90 95
346 gac tcg tac ccg ctg ttc gac ggc atc ttc tgc agc taa taa 330
347 Asp Ser Tyr Pro Leu Phe Asp Gly Ile Phe Cys Ser
348 100 105
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352 <211> LENGTH: 108
353 <212> TYPE: PRT
354 <213> ORGANISM: Plasmodium falciparum
356 <400> SEQUENCE: 10
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359 1 5 10 15
362 Ile Ser Gln His Gln Cys Val Lys Lys Gln Cys Pro Glu Asn Ser Gly
363 20 25 30
366 Cys Phe Arg His Leu Asp Glu Arg Glu Glu Cys Lys Cys Leu Leu Asn
367 35 40 45

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VERIFICATION SUMMARY

DATE: 09/27/2002

PATENT APPLICATION: US/09/134,333A

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